



DEPARTMENT OF AGRICULTURE

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Equal Opportunity Employer

Pesticide Use Enforcement Program Workplan for 2010-2012

Agricultural Commissioner Budgeted Staff Allocation for 2010

- 1 – County Agricultural Commissioner
- 1 – Assistant Agricultural Commissioner
- 3 – Deputy Agricultural Commissioners
- 15 – Agricultural Biologists
- 4 – Typist Clerks
- 1 – Office Supervisor
- 1 – Account Clerk
- 1 – Automation Systems Analyst*

As needed extra help staff, primarily for pest detection and standardization programs

* Retiring March 30, 2010.

Pesticide Use Enforcement Programs Resources

Including administration, supervision, inspector, technical, and clerical hours, historical utilization of staff on pesticide use enforcement programs and projection for the next calendar year are as follows [1,770 hours = 1 full time equivalent (fte)]:

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CY 2005 – 13.6 PUE fte (41 % of Departmental 33.1 total fte)
CY 2006 – 16.7 PUE fte (47 % of Departmental 35.6 total fte)
CY 2007 – 14.6 PUE fte (42.8 % of Departmental 34.0 total fte)
CY 2008 – 14.2 PUE fte (40.8% of Departmental 34.8 total fte)
CY 2009 (projected) - 14.5 (41.8% of Departmental 34.7 total fte)

5-year average –14.7 PUE fte (42.7% of Departmental 34.4 total fte)

Notes. FY 05/06 and FY 06/07 both had changes in staffing (vacating of positions and re-hiring for these positions). A County wide budget cut of 10% for the 2009/2010 fiscal year has resulted in a hiring freeze and loss of 3 vacant full time biologist positions. Funds for purchase of new equipment will be restricted to items of necessity. Additional budget cuts are anticipated for the 2010/2011 fiscal year budget

PUE Program Assets

- Merced County Agricultural Commissioner's Office (MCAC) has two offices. The main office in Merced has 11 agricultural biologist and four clerical staff assigned to it. The district office in Los Banos has four agricultural biologists and one clerical staff assigned to it.
- Each agricultural biologist whose primary assignment is PUE has an assigned vehicle. In addition, PUE staff has been provided with digital cameras and thermo-anemometers. In order to verify buffer zones, one laser rangefinder is available in each office.
- Agricultural biologists have computers at their desks providing full access to the restricted materials permit / operator identification number program. Also, each computer has broadband internet access allowing for quick access to pesticide related information.
- Agricultural biologist staff has significant experience with the county. The range of experience ranges from 1 to 35 years. Median years of experience = 12.7 years.
- All agricultural biologists work in the PUE program to one degree or another. Seven agricultural biologists have PUE as their primary assignment. All biologist issue permits, conduct inspections, review notices of intent and use reports, and assist with investigations.
- Two of our agricultural biologists have obtained the deputy agricultural commissioner license of eligibility from CDFA. They have extensive PUE experience. One other biologist is currently preparing to take the exam.
- Our department has one designated bilingual agricultural biologist who is fluent in Spanish
- All agricultural biologist staff have cell phones with direct connect capability. It is through the same provider as DPR, allowing direct-connect with our enforcement branch liaison.

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- Our staff automation systems analyst has jointly developed the new Ag GIS (geographical information system) permit program with personnel in Glenn County. Our staff automation systems analyst implemented the new Permit 6 program midway through FY 06/07. Staff has been trained on its use which offers a friendlier user interface, a more accessible information database, and the future possibility to incorporate GIS information directly into the permit program.

Restricted Materials Permitting / Licensee Registration Program

3-Year Statistical History

	2007	2008	2009	3-Year Average
Restricted Materials Permits Issued	1691	1569	1376	1545
Private Applicator Certifications	344	308	224	292
Notices of Intent Reviewed	5726	5283	3780	4930
Pre-Application Site Inspections	455	418	258	377
-- Percentage	7.9%	7.9%	6.8%	7.5%
Operator Identification Numbers Issued	140	105	67	97
Continuing Education Sessions	16	18	15	16
C.E. Session Private Applicator Attendance	328	373	293	331
C.E. Session Licensee Attendance	296	322	216	278
Pest Control Business Registrations	168	149	122	146
Pest Control Advisor Registrations	208	207	155	190
Pest Control Pilot Registrations	47	51	34	44
Farm Labor Contractor Registrations	91	100	89	93
Structural Operator Notifications Received	52	48	17	39

Local Conditions – Sensitive Sites

- Residences and occupied businesses near field fumigations
- Rural schools in the midst of agricultural operations
- Ag/Urban interface (mostly in the Los Banos area but an emerging issue with development associated with the new University of California campus)
- Pesticide applications to crops in proximity to waterways
- Sites with a history of neighbor complaints
- Endangered species habitats
- Sensitive crops (protection of organic production)
- Groundwater protection areas (357 sections in Merced County)

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Local Conditions – Cropping Patterns

- Merced County produces over 200 commodities. All areas of the county are heterogeneous in planting patterns. For workload reasons, the county is divided into five pesticide use enforcement districts with the major crops as follows:

- District 1 (Merced – Atwater– Livingston–Delhi – Snelling)
 - Tree crops (almond, peach, pistachio, walnut, apricot); vine crops (grape, berries, kiwi); dairies and dairy support crops (silage corn, sudan grass, grain hay, alfalfa); poultry and egg production; rangeland (irrigated and non-irrigated); vegetable crops (sweet potato, tomato, strawberry, watermelons); nursery crop production.
 - Generally medium to large operations with considerable urban interface occurring around the perimeters of Merced, Atwater, Livingston and Delhi. Infrastructure and development of the area around the new University of California, Merced is also becoming an urban interface concern. Seasonal streams used during the summer to move irrigation water and the Merced River are significant environmental resources and are of special environmental concern. The west part of the district has primarily leaching sections of concern for groundwater protection.
- District 2 (Merced – Le Grand – El Nido – Planada)
 - Tree crops (almond, pistachio, fig, dried plum, walnut, pomegranate); vine crops (grape); dairy and dairy support crops (silage corn, grain hay, alfalfa); vegetable crops (tomato, radicchio, peppers, truck farming); nursery crop production; field crops (cotton, rice, grains); beef cattle; irrigated pasture and rangeland.
 - Generally small to medium size farms with significant urban interface issues due to areas of infrastructure and development near the new University of California, Merced. Seasonal creeks running through farmland are of special environmental concern. Much of this district has groundwater protection concerns (mainly run-off).
- District 3 (Dos Palos – Los Banos)
 - Field crops (cotton, grain, rice, alfalfa, sugar beets, silage corn, dried beans); vegetable crops (tomato, cantaloupe, honeydew melon, onion); tree crops (almond); beef and sheep operations; irrigated pasture.
 - Mostly medium to very large farming operations. Significant urban interface issues. Expanding urbanization will be an issue for the foreseeable future (Los Banos). Only a small area in the north portion of the district with groundwater concerns from leaching. Environmental concerns are wildlife refuges, duck clubs, and significant endangered species habitat.
- District 4 (Los Banos – Santa Nella – Gustine)
 - Tree crops (almond, cherry, walnut, apricot, dried plum); vegetable crops (tomato, cantaloupe, lima bean); field crops (cotton, sugar beets, grains); dairy and dairy support crops (silage corn, grain hay, sudan grass, alfalfa); rangeland; wildlife areas (refuges, duck clubs).

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- Farm size runs from small to large. Significant urban interface issues (Los Banos). Expanding urbanization will be an issue for the foreseeable future. Wildlife refuges, state parks, and endangered species are the primary environmental concerns.
- District 5 (Merced – Atwater– Stevinson – Livingston – Hilmar – Delhi)
 - Dairy and dairy support crops (silage corn, grain hay, alfalfa, sudan grass); grapes(wine and raisin); almonds; peaches; blueberries; kiwi; walnuts; vegetable crops (sweet potato, watermelons, tomato, truck farms); poultry and egg production; field crops (grains, dried beans, sugar beets, cotton,).
 - Mostly small to medium size farm operations. Emerging urban interface issues (Livingston, Atwater). Field fumigation buffer zones are a major concern near expanding rural residential areas. Environmental concerns are centered on the Merced River and wildlife refuges. Shallow surface water tables results in virtually the entire district designated for groundwater protection from leaching.

Permit and Registration Process

- Agricultural biologists on rotating office duty issue pesticide permits, operator identification numbers, and licensee registrations. For approximately three months (December through February) we operate on an appointment basis, with up to four agricultural biologists on duty at any one time.
- Permit applicants are expected to come with updated site and vicinity maps, and anticipated pesticide needs. During the permit review process, site maps are reviewed for completeness; proposed restricted materials are compared to the commodities for any off-label concerns and necessity of use; sites are cross checked with groundwater protection area and endangered species maps for necessary permit conditioning; and, pesticide use reporting compliance for the previous year is checked.
- DPR suggested permit conditions have been incorporated into Merced County Agricultural Commissioner permit conditions along with several Merced County specific permit conditions. Each new permit and permit renewal is provided copies of applicable permit conditions and the permittee signs an acknowledgement that he/she has received copies.
- Private applicator certification is handled at the same time as permit issuance. If the private applicator needs to take the examination, it is administered and scored in advance of permit review and issuance. The private applicator re-certification test has been used since December of 2007. If renewal is by continuing education, the private applicator records are checked to verify completion of minimum requirements.
- Notices of intent (NOI's) to use restricted materials are reviewed in a timely manner. Staff knowledge and experience is invaluable in this step to know where potential problems exist and how to customize conditions for particular applications. Pre-application site inspections are performed when weekend duty staff is unfamiliar with the district or when district inspectors are

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not sure of surrounding areas. Pre-application site inspections are performed on nearly all field fumigation NOIs. A list of sensitive sites requiring special consideration has been developed and identified on a county map and is available to staff.

- Continuing education is a high priority in Merced County, both for our private applicators and licensees. During 2009, the department provided 22 hours of continuing education designed for private applicators in which 24 hours covered laws and regulations. Continuing education topics usually are directed towards new or upcoming regulations. In addition to C.E. classes, the department provides outreach to several public agencies and events concerning pesticide regulation and safety
- Growers are notified annually of new and expected regulation changes through mail and again at the time of permit issuance. At the time of permit issuance, growers are given a chance to discuss new regulations, or those that are unclear to them on a one on one basis with the biologist. Several informational handouts are available to them at this time.

Goals to Improve the Permit Issuance Process

- Accuracy of maps and identification of sensitive sites on the maps is an ongoing concern. As mentioned before, the experience of staff is invaluable when reviewing a notice of intent when the map may not be the best. However, we recognize that this knowledge may not always be available to the person doing the NOI review.
- Stress will continue to be placed on the evaluation and necessity of growers requesting the addition of restricted materials to their permits, and accuracy of information recorded on permits.

As resources allow, training of staff and development of the new AG GIS permit program will be stressed in order to evaluate and provide the most accurate and complete permits possible.

Deliverables

- In 2008, all of the restricted materials permits were reviewed in advance of the permit issuance season to allow permits with inadequate maps to be identified and the folder flagged to alert the permit-issuing biologist of any deficiencies. The permit issuance checklist utilized while reviewing permits before the 2009 permit issuance season, will continue to be used to flag and correct any discrepancies or inadequacies in the permits, which will be, or have already been issued. Permit holders with names I-Q will be the focus for the 2010 fiscal year. During permit issuance, we will continue to spend more time on reviewing the maps for accuracy.
- We will also continue to pay close attention to pesticide applications to crops in proximity to waterways for compliance with regulations.

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- A supply shortage of 1, 3 dichloropropene, created a need for new methods and uses of alternative fumigants in 2009 to fumigate acreage (mainly sweet potatoes) previously fumigated with 1, 3 dichloropropene. Because of the newly introduced methods and uses, and the potential of off-site movement, applications of fumigants such as 1, 3 dichloropropene, metam sodium, metam potassium, chloropicrin, and methyl bromide will continue to be thoroughly reviewed, especially near occupied areas

- Merced County Permit Conditions were reviewed and updated for the 2010 permit season. The conditions will be reviewed and updated on a year-to-year basis as conditions and requirements change. Significant changes to 2010 permit issuance include the requirement for metam potassium /metam sodium users to complete a DPR approved stewardship certification class, and the notification of amended regulations pertaining to: notice of applications, notification of completion of applications, application specific information, field entry after scheduled or completed applications, and requirements for early entry employees.

- In conjunction with the permit reminder letter, emphasis will be placed on the requirement for accurate and complete maps. Permits will be spot checked for accuracy of their maps and biologist will get immediate written feedback after issuing permits of any maps which are not complete, accurate, or clear. Permits will also be checked at this time for other discrepancies or deficiencies related to the permit issuance process.

Compliance Monitoring

3-Year Statistical History

	2007	2008	2009	3-Year Average
INSPECTIONS				
Ag Application and Mix/Load Inspections	334	230	215	260
Field Worker Safety Inspections	68	38	47	51
Field and Commodity Fumigation Inspections	70	63	48	60
Worker Safety Headquarters Inspections	60	46	44	50
Ag Records Inspections	35	30	20	28
Structural Operator Inspections	54	39	25	39
Fiscal Year Totals	621	446	399	489
NON-COMPLIANCE FOLLOW UP				
Inspections Requiring Follow Up	54	19	22	32
Follow Up Inspections Completed	41	10	11	21
-- Percentage	75.9%	52.6%	50.0%	59.5%
INVESTIGATIONS				
Human Effect Investigations	24	10	19	21
Other Investigations	16	10	10	15

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Comprehensive Inspection Plan

During 2009, Merced County attempted to conduct inspections at or near the average of the previous three years. In 2009, PUE staff have shifted into more enforcement regulation activities such as accessing noncompliances, and decision report writing. Merced County will again attempt to conduct inspections at this average, but may fall short due to the redirection of staff time, and less staff time available for PUE due to budget cuts. Continuing our emphasis from recent years, emphasis will be placed on verifying compliance with worker safety standards, field fumigation requirements, and monitoring applications in the ag/urban interface. Emphasis will continued to be placed on surface water and well water protection. Also, emphasis on follow-up inspections for persons or businesses with prior non-compliances will continued to be stressed.

Goals to Improve Compliance Monitoring

- Improve corrective action to non-compliances identified through site inspections and investigations. Maintain a comprehensive inspection program to ensure inspections are conducted throughout the year and balanced throughout the five districts.
- Improve the timeliness of needed follow-up inspections to verify compliance and facilitate faster enforcement response evaluation.
- More time will be devoted to pesticide use reporting compliance in 2010. A quickly assessable list generated by the Permit 6 program and importable to Microsoft Excel spreadsheet will be utilized to assess pesticide use reporting compliance of users of grower identification numbers and restricted material permits. Permits and grower identification numbers will also be flagged for later audit of sales records and storage site inspections to determine compliance.

Deliverables

- Part of accomplishing this through better documentation of non-compliances in the place provided on the inspection form or on supplemental pages. Direct communication with responsible persons with the authority to make the changes necessary to correct the non-compliances.
- Inspection database is now in place. Now that each biologist has a computer the next step is to make searches more accessible. This will improve the tracking of follow up inspections especially when a biologist other than the original biologist conducts the subsequent inspection.
- Biologist will be responsible for tracking of quantity and status of inspections and investigations performed or conducted in their respective districts.

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Investigation Response and Reporting Improvement

- Significant emphasis has been placed on improving report writing in recent years. Reports are now much more thorough and professional. However, a few areas have been identified which could improve our investigations:
- Less experienced biologist and biologist not routinely conducting inspections, will continue to be trained and offered opportunities for training by DPR staff when available. An effort to assign investigations to other licensed staff on a limited basis will be made to lighten investigative burdens on PUE staff, and to offer PUE experience to staff whose primary responsibility are not PUE.
- Better complaint tracking has been accomplished with an illness/complaint log. Emphasis will be placed on the higher priority investigations and efforts are made to complete them in a timely manner. A stronger emphasis will continue to be placed on completing investigations in a timely manner. There is also still a need to streamline the process to finalize the minor complaints. A form for minor complaints has been developed and will be utilized in 2010.
- Investigational samples. A locking freezer that is dedicated to storing investigational samples prior to shipment to CDFA's Center for Analytical Chemistry is available to only authorized staff. New staff and veteran staff need training in taking various types of samples. To accomplish this, training by the enforcement branch liaison will need to be provided. A new modular building has been added in 2009. A space in this building is dedicated to the storage of PUE samples, and other equipment used for PUE activities.
- Improved planning during early stages of investigations. A sample plan form was developed and will be utilized for investigations. Advocate training was attended by staff during 2009. Additional advocate training offered by DPR would be beneficial to other staff to help identify essential elements of potential violations and to assure that necessary evidence is obtained.

Enforcement Response

3-Year Statistical History

	2007	2008	2009	3-Year Average
Compliance Actions	31	31	48	37
Civil Penalty Actions	11	15	7	11

Self-assessment of Merced County's enforcement response reveals the following:

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- Agricultural biologist staff has received adequate training and has the experience in how to properly address noncompliances through appropriate compliance action. Staff completes compliance actions within acceptable time frames.
- A compliance history database was started several years ago, and all inspections, compliance actions, and civil penalty actions are being entered into the database. Compliance history reports are immediately available. This has streamlined the process of analyzing the enforcement options.
- We maintain a pesticide episode investigation log for those cases which will not be assigned a WH&S illness investigation number or a priority episode tracking number.
- We will continue to consider other enforcement options including denying restricted materials permits, licensee registrations, referral of cases to DPR, or consultation with the Merced County District Attorney for the most egregious cases.
- Biologist have begin preparing and writing “decision report packages”, which would contain draft decision reports, follow-up inspections, and/or compliance interviews. Decision reports written by biologist are then be reviewed by the Deputy and /or Assistant Commissioner
- An Enforcement Response Coordinator was contracted to provide additional assistance and to help evaluate and streamline the flow of enforcement actions.

Goal to Improve Enforcement Response

Improve the timeliness of evaluating non-compliances through the Enforcement Response Regulations. Staff are involved in the process of writing decision reports in order to meet the proposed 30 day review requirement.

Deliverables

- Continued training of agricultural biologists in the Pesticide Enforcement Response Regulations (ERR) and how to process noncompliances through the regulations to arrive at appropriate recommendations for civil penalty or compliance action. This can be accomplished through joint training provided by experienced staff and our enforcement branch liaison on a one-on-one basis throughout the year. Once this training is provided, staff would be guided in the process of making recommendation for actions.
- More timely tracking of noncompliances and processing through the Pesticide Enforcement Response Regulation database has already been initiated. Regular consultation with staff to refine and strengthen this process will be implemented.

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- Development of a letter informing inspected persons/businesses with noncompliances, of the Commissioners requirements and procedures under the enforcement response regulations to evaluate and act on noncompliances when directed by regulation.